What is claimed is:

1. A hydrogen storage material, comprising:

a molecule including space formed with a planar sheet constituted by six-membered rings of carbon atoms,

wherein at least one opening is formed in the sheet.

2. The hydrogen storage material of claim 1,

wherein the molecule is a columnar or prismatic molecule having the sheet as a sidewall, and

the opening is formed in any one of an end portion and the sidewall of the molecule.

3. The hydrogen storage material of claim 1,

wherein the opening is larger than one of the six-membered rings of carbon atoms.

4. The hydrogen storage material of claim 1,

wherein an R value of the hydrogen storage material is not less than 0.02 and not more than 0.10, the R value indicating a ratio of a spectral integrated intensity of D band to a spectral integrated intensity of G band, the spectral integrated intensities being obtained by laser Raman spectroscopic analysis.

5. The hydrogen storage material of claim 1,

wherein the molecule is a single-walled carbon nanotube or a multiwalled carbon nanotube.

6. A method of manufacturing a hydrogen storage material, comprising:

producing a molecule including space formed with a planar sheet constituted by six-membered rings of carbon atoms; and

performing an opening preparation process on the molecule.

7. The method of manufacturing a hydrogen storage material of claim 6, wherein the molecule is a columnar or prismatic molecule having the sheet as a sidewall.

8. The method of manufacturing a hydrogen storage material of claim 6, wherein the opening preparation process is oxidation treatment.

9. The method of manufacturing a hydrogen storage material of claim 8, wherein the oxidation treatment uses at least one of nitric acid, sulfuric acid, hydrochloric acid, and a hydrogen peroxide solution.

10. The method of manufacturing a hydrogen storage material of claim 8, wherein the oxidation treatment uses an oxidative gas.

11. The method of manufacturing a hydrogen storage material of claim 10, wherein the oxidative gas contains at least one of air, oxygen, ozone, chlorine dioxide, chlorine, bromine, iodine, a nitrogen oxide, and a sulfur oxide.

12. A hydrogen storage body, comprising:
a hydrogen storage material containing a molecule including space formed with a planar sheet constituted by six-membered rings of carbon atoms,
wherein at least one opening is formed in the sheet.

13. A hydrogen storage device, comprising
a hydrogen storage body including a hydrogen storage material
the hydrogen storage material comprising:
a molecule including space formed with a planar sheet constituted by six-membered rings of carbon atoms,
wherein at least one opening is formed in the sheet.

14. A fuel cell vehicle, comprising:

a hydrogen storage device including a hydrogen storage body having a hydrogen storage material,

the hydrogen storage material comprising:

a molecule including space formed with a planar sheet constituted by six-membered rings of carbon atoms,

wherein at least one opening is formed in the sheet.